- 1. (original) A lamp comprising a lamp bulb (1), on the surface of which at least one interference filter (3) is at least partially located, wherein at least this interference filter (3) comprises several layers, wherein the layer structure comprises alternating layers (3.1) with a higher refractive index and layers (3.2) with a lower refractive index, wherein at least the outer layer and/or at least one inner layer of the interference filter (3) comprises a protective layer (4) to reduce thermal and/or intrinsic stresses, and wherein the thickness of the protective layer (4) or protective layers (4) has a value below 40% of the value of all other layers with the lower refractive index.
- 2. (currently amended) Lamp as claimed in claim 1, characterized in that the materials used in the protective layer (4), the layer (3.2.), and the lamp bulb (1) are substantially comparable have comparable indices of thermal expansion.
- 3. (currently amended) Lamp as claimed in claim 1, characterized in that the layer (3.2) of the interference filter (3) with the lower refractive index preferably-comprises mainly SiO_{2-and that} the second layer (3.1) of the interference filter (3) comprises a material which has a higher refractive index than SiO₂, preferably mainly zirconium oxide (ZrO₂).
- 4. (currently amended) Lamp as claimed in claim 3, characterized in that the second layer (3.1) comprises a material from the group of titanium oxide, tantalum oxide, niobium oxide, hafnium oxide, silicon nitride, and particularly preferably zirconium oxide ZrO₂, or a mixture of these materials.

5. (currently amended) Lamp as claimed in claim 1, characterized in that the preferred lamp is a high intensity discharge lamp or a halogen lamp.

6.(original) Lamp as claimed in claim 1, characterized in that the one protective layer (4) or all protective layers (4) is or are arranged within the interference filter (3).

7. (Previously presented) Illumination unit with at least one lamp as claimed in claim 1.

8. (new) Lamp as claimed in claim 3, wherein the second layer (3.1) of the interference filter (3) comprises a material which has a higher refractive index than SiO₂.

9. (new) Lamp as claimed in claim 8, wherein the second layer (3.1) of the interference filter comprises zirconia.

10. (new) Lamp as claimed in claim 9, wherein the second layer (3.1) of the interference filter comprises mainly zirconium oxide (ZrO_2).

11. (new) Lamp according to claim 2 wherein the bulb, the layer, and the protective layer have the same chemical compositions.

12. (new) A lamp comprising

i) a lamp bulb;

- ii) an interference filter disposed on a surface of the lamp bulb, the interference filter comprising:
 - a first plurality of layers having a first index of refraction and made of a first material;
 and
 - b) a second plurality of layers having a second index of refraction and made of a second material, the second index of refraction being higher than the first index of refraction, the second plurality of layers alternating with the first plurality of layers, such that the filter begins at the lamp bulb with one of the second plurality of layers and ends with one of the first plurality of layers; and
- iii) at least one protective layer made of the first material, the protective layer having a thickness that is no more than 40% of the total thickness of the first plurality of layers.
- 13. (new) Lamp according to claim 12, wherein the second material comprises zirconia and the lamp is a high intensity discharge lamp.
- 14. (new) Lamp according to claim 13, wherein the first material comprises silica,
- 15. (new) Lamp according to claim 12, wherein the protective layer comprises an outer layer.
- 16. (new) Lamp according to claim 12, wherein the protective layer comprises at least one of the first plurality of layers intermediate between the bulb and an outside of the interference filter.

- 17. (new) Lamp according to claim 16, wherein the protective layer comprises at least two of the first plurality of layers intermediate between the bulb and an outside of the interference filter.
- 18. (new) Lamp according to claim 12, wherein the bulb is made of the first material.
- 19. (new) Lamp according to claim 1, wherein the protective layer reduces thermal stress.
- 20. (new) Lamp according to claim 1, wherein the lamp is a halogen lamp